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On February 12, 2004

By CLC

Attorney Docket No. P006.210

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of:

Gjerde *et al.*

Application No.: 10/733,534

Filed: 12/10/2003

For: Open Channel Solid Phase Extraction
Systems and Methods

Examiner: N/A

Art Unit: N/A

INFORMATION DISCLOSURE
STATEMENT UNDER 37 CFR § 1.97 and
§ 1.98

Commissioner for Patents
Washington, D.C. 20231

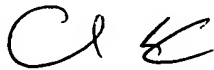
Sir:

The references cited on attached form PTO-1449 are being called to the attention of the Examiner. Pursuant to 37 CFR 1.98, copies of the references are not required to be provided because the information was submitted to the office in U.S. Application No. 10/434,713 (filed 05/08/2003 and relied upon for an earlier filing date under 35 U.S.C. 120) in compliance with 37 CFR 1.98(a)-(c). It is respectfully requested that the cited information be expressly considered during the prosecution of this application, and the references be made of record therein and appear among the "references cited" on any patent to issue therefrom.

As provided for by 37 CFR 1.97(g) and (h), no inference should be made that the information and references cited are prior art merely because they are in this statement and no representation is being made that a search has been conducted or that this statement encompasses all the possible relevant information.

Applicant believes that no fee is required for submission of this statement, since it is being submitted prior to the first Office Action and within 3 months of the filing date. However, if a fee is required, the Commissioner is authorized to deduct such fee from the undersigned's Deposit Account No. 50-2852. Please deduct any additional fees from, or credit any overpayment to, the above-noted Deposit Account.

Respectfully submitted,

A handwritten signature in black ink, appearing to be 'C. Holman', written in a cursive style.

Christopher M. Holman
Reg. No. 40,021

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Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>			Complete if Known		
			Application Number	10/733,534	
			Filing Date	12-10-2003	
			First Named Inventor	Gjerde	
			Group Art Unit	N/A	
			Examiner Name	N/A	
Sheet	1	of	06	Attorney Docket Number	P006.210

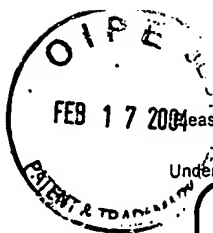
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¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant is to place a check mark here if English language Translation is attached.

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Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 2 of 6

Complete if Known

Application Number	10/733,534
Filing Date	12-10-2003
First Named Inventor	Gjerde
Group Art Unit	N/A
Examiner Name	N/A
Attorney Docket Number	P006.210

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS

Examiner Initials ¹	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	AM	J. BETTS, et al., "Identification of Phosphorylation Sites on Neurofilament Proteins by Nanoelectrospray Mass Spectrometry," Journal of Biological Chemistry, 1997, pp. 12922-12927, Vol. 272, No. 20.	
	AN	G.K. BONN, et al., "Rapid Metal-Interaction Chromatography of Proteins and Peptides on Micropellicular Sorbents," Chromatographia, 1990, pp. 484-488, Vol. 30, No. 9/10.	
	AO	J. CAI and Z.E. RASSI, "On-line Preconcentration of Triazine Herbicides with Tandem Octadecyl Capillaries-Capillary Zone Electrophoresis," Journal of Liquid Chromatography, 1992, pp. 1179-1192, Vol. 15, No. 6/7.	
	AP	J. CAI and Z.E. RASSI, "Selective On-line Preconcentration of Proteins by Tandem Metal Chelate Capillaries - Capillary Zone Electrophoresis," Journal of Liquid Chromatography, 1993, pp. 2007-2024, Vol. 16, No. 9/10.	
	AQ	V. DOLNIK, et al., "Wall Coating for DNA Sequencing and Fragment Analysis by Capillary Electrophoresis," Journal of Microcolumn Separations, 1998, pp. 175-184, Vol. 10, No. 2.	
	AR	R. EISERT and J. PAWLISZYN, "Automated In-Tube Solid-Phase Microextraction Coupled to High-Performance Liquid Chromatography," Analytical Chemistry, 1997, pp. 3140-3147, Vol. 69, No. 16.	
	AS	P.D. GROSSMAN and J.C. COLBURN, Editors, "Capillary Electrophoresis Theory and Practice," Author: S. HJERTEN, "Isoelectric Focusing in Capillaries," 1992, pp. 199-200, 213-214, Academic Press, Inc., New York, New York.	
	AT	T.J. GRIFFIN and R. AEBERSOLD, "Advances in Proteome Analysis by Mass Spectrometry," Journal of Biological Chemistry, 2001, pp. 45497-45500, Vol. 276, No. 49.	
	AU	N.A. GUZMAN, "Biomedical Applications of On-Line Preconcentration - Capillary Electrophoresis Using an Analyte Concentrator: Investigation of Design Options," Journal of Liquid Chromatography, 1995, pp. 3751-3768, Vol. 18, No. 18/19.	
	AV	I. HALASZ, "Mass Transfer in Ideal and Geometrically Deformed Open Tubes, II. Potential Application of Ideal and Coiled Open Tubes in Liquid Chromatography," Journal of Chromatography, 1979, pp. 229-247, Vol. 173.	
	AW	K. HOFMANN and I. HALASZ, "Mass Transfer in Ideal and Geometrically Deformed Open Tubes, I. Ideal and Coiled Tubes with Circular Cross-Section," Journal of Chromatography, 1979, pp. 211-228, Vol. 173.	

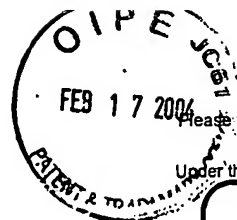
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		Filing Date	12/10/2003		
		First Named Inventor	Gjerde		
		Group Art Unit	N/A		
		Examiner Name	N/A		
Sheet	3	of	6	Attorney Docket Number	P006.210

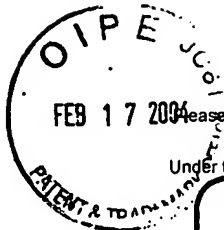
OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials ²	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	Ax	D. ISHII and T. TAKEUCHI, "Open Tubular Capillary LC," Journal of Chromatographic Science, 1980, pp. 462-472, Vol. 18.	
	Ay	V. KASICKA, et al., "Contribution of Capillary Coiling to Zone Dispersion in Capillary Zone Electrophoresis," Electrophoresis, 1995, pp. 2034-2038, Vol. 16.	
	Az	H. KATAOKA, et al., "Development of On-Line In-Tube Solid-Phase Microextraction/LC/MS System," Chromatography, 1999, pp. 237-246, Vol. 20, No. 3.	
	BA	H. KATAOKA, et al., "Automated In-Tube Solid-Phase Microextraction Coupled with Liquid Chromatography/Electrospray Ionization Mass Spectrometry for the Determination of B-Blockers and Metabolites in Urine and Serum Samples," Analytical Chemistry, 1999, pp. 4237-4244, Vol. 71, No. 19.	
	BB	H. KATAYAMA, et al., "Development of Novel Capillary Coating Based on Physical Adsorption for Capillary Electrophoresis," Analytical Sciences, 1998, pp. 407-408, Vol. 14.	
	BC	P. KENIS, et al., "Microfabrication Inside Capillaries Using Multiphase Laminar Flow Patterning," Science, 1999, pp. 83-85, Vol. 285.	
	BD	P. KENIS, et al., "Fabrication Inside Microchannels Using Fluid Flow," Accounts of Chemical Research, 2000, pp. 841-847, Vol. 33, No. 12.	
	BE	A. LINK, et al., "Direct Analysis of Protein Complexes Using Mass Spectrometry," Nature Biotechnology, 1999, pp. 676-682, Vol. 17.	
	BF	C. LOMBARDO, et al., "In Vitro Phosphorylation of the Epidermal Growth Factor Receptor Autophosphorylation Domain by c-src: Identification of Phosphorylation Sites and c-src SH2 Domain Binding Sites," Biochemistry, 1995, pp. 16456-16466, Vol. 34.	
	BG	A. MARZIALI and M. AKESON, "New DNA Sequencing Methods," Annu. Rev. Biomed. Eng., 2001, pp. 195-223, Vol. 3.	
	BH	E. MINNOOR, "Applications of a sulfonated-polymer wall-modified open-tubular fused-silica capillary in capillary zone electrophoretic separations," Journal of Chromatography A, 2000, pp. 297-309, Vol. 884.	

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		Filing Date	12/10/2003		
		First Named Inventor	Gierde		
		Group Art Unit	N/A		
		Examiner Name	N/A		
Sheet	4	of	6	Attorney Docket Number	P006.210

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	BI	W.H. MCDONALD and J.R. YATES III, "Proteomic Tools for Cell Biology," Traffic, 2000, pp. 747-754, Vol. 1.	
	BJ	L. NARDI, "Capillary Extractors for 'negligible depletion' sampling of benzene, toluene, ethylbenzene and xylenes by in-tube solid-phase microextraction," Journal of Chromatography A, 2003, pp. 85-91, Vol. 985.	
	BK	T. STROINK, et al., "On-Line Sample Preconcentration in Capillary Electrophoresis, Focused on the Determination of Proteins and Peptides," Electrophoresis, 2001, pp. 2374-2383, Vol. 22.	
	BL	R. TIJSSEN, "Liquid Chromatography in Helically Coiled Open Tubular Columns," Separation Science and Technology, 1978, pp. 681-722, Vol. 13, No. 8	
	BM	T. WANG and R. HARTWICK, "Capillary Modification and Evaluation Using Streaming Potential and Frontal Chromatography for Protein Analysis in Capillary Electrophoresis," Journal of Chromatography, 1992, Vol. 594.	
	BN	M. YE, et al., "Study on Open Tubular Capillary Affinity Liquid Chromatography," Journal of Chromatographic Science, 2000, Vol. 38.	
	BO	R. TIJSSEN, "Axial Dispersion and Flow Phenomena in Helically Coiled Tubular Reactors for Flow Analysis and Chromatography," Analytica Chimica Acta, 1980, pp. 71-89, Vol. 114.	
	BP	R. TIJSSEN, "Effect of Column-Coiling on the Dispersion of Solutes in Gas Chromatography, Part I: Theory," Chromatographia, 1970, pp. 525-531, Vol. 3.	
	BQ	http://www.nestgrp.com/pdf/Ap2/SuproTip.pdf , Downloaded on July 24, 2003, Publication date unknown.	
	BR	http://www.nestgrp.com/pdf/Ap2/STX_Instr.pdf , Downloaded on July 24, 2003, Publication date unknown.	

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	Application Number	10/733,534
	Filing Date	12-10-2003
	First Named Inventor	Gjerde
	Group Art Unit	N/A
	Examiner Name	N/A
	Attorney Docket Number	P006.210

U.S. PATENT DOCUMENTS						
Examiner Initials	Cite No.	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, lines, Where Relevant Passages or Relevant Figures Appeal
		Number	Kind Code (if known)			

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		Office	Number	Kind Code (if known)				

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS				
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	CA	W. NASHABEH and Z. EL RASSI, "Enzymophoresis of nucleic acids by tandem capillary enzyme reactor-capillary zone electrophoresis," J. of Chromatography, 1992, pp. 251-264, Vol. 596.		
	CB	L. AMANKWA and W. KUHR, "On-line Peptide Mapping by Capillary Zone Electrophoresis," Anal. Chem., 1992, pp. 1610-1613, Vol. 64.		
	CC	L. AMANKWA and W. KUHR, "On-line Peptide Mapping by Capillary Zone Electrophoresis," Anal. Chem., 1993, pp. 2693-2697, Vol. 65.		

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		Number	Kind Code (if known)			
	DA	US-3,097,927		Skeggs	07-16-1963	
	DB	US-4,028,056		Snyder et al.	07-07-1977	
	DC	US-5,565,622		Murphy	10-15-1996	

FOREIGN PATENT DOCUMENTS								
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		Country Code	Number	Kind Code (if known)				
	DD	WO	96/12194	A1	Holmbom et al.	04-25-1996		
	DE	WO	98/41855	A1	Pawliszyn et al.	09-24-1998		
	DF	WO	2004/007081	AI	Phynexus	01-22-2004		
	DG	EP	0 183 950	A1	Hewlett-Packard	06-11-1986		

NON PATENT LITERATURE DOCUMENTS				
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	DH	R. EISERT and J. PAWLISZYN, "Automated In-Tube Solid-Phase Microextraction Coupled to High-Performance Liquid Chromatography," Analytical Chemistry, 1997, pp. 3140-3147, Vol. 69, No. 16.		
	DI	M.-C. HENNION, "Solid-phase extraction: method development, sorbents, and coupling with liquid chromatography," Journal of Chromatography A, 1999, pp. 3-54, Vol. 856.		
	DJ	M. MA et al., "Solvent microextraction with simultaneous back-extraction for sample cleanup and preconcentration: preconcentration into a single microdrop," Anal. Chem., 1999, pp. 288-393, Vol. 71.		
	DK	A. ZLATKIS et al., "Rapid Analysis of Trace Organics in Aqueous Solution by Enrichment in Uncoated Capillary Columns," Chromatographia, 1990, pp. 149-154, Vol. 30.		

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